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RESEARCHES UPON THE TREATMENT OF NEURALGIA BY THE  
INJECTION OF NARCOTICS AND SEDATIVES, WITH CASES.

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[Communicated for the Boston Medical and Surgical Journal.]

I PURPOSE to lay before the profession the detailed account of several cases of severe neuralgia, under my care during the last fifteen months, and treated principally by the injection of narcotics, after the method advocated by Dr. Alex. Wood, of Edinburgh. I shall offer no apology for doing so. The neuralgic affections form a class of diseases in which our present mode of treatment offers little that is satisfactory. Every practical physician must confess, that after exhausting the most judicious, persevering, rational and radical methods of treatment (and what article in the materia medica and what surgical expedient has not been pressed into service?), he has often been compelled to fall back on the empirical administration of remedies.

To point out a method of treatment which, although not always curative, might at least be generally palliative, when employed in cases adapted to the treatment, has ever been the great desideratum to be reached. Hence it is easy to account for the enthusiasm with which the proposed treatment by "*subcutaneous injection*" has been received by the profession everywhere, both in Europe and America. Indeed, about the time Dr. Wood published his little treatise "*On a New Method of treating Neuralgia by the Direct Application of Opiates to the Painful Points*," I found myself in the same predicament in which, no doubt, many a physician has often, before and since, found himself. I had, for instance, the doleful opportunity of witnessing very often the most excruciating paroxysms of a highly respected friend of mine. For more than seven years had the disease, with ever-increasing violence, asserted its supremacy over every mode of treatment the most eminent and skilful medical men could devise; and the patient was finally consoled with the delusive hope that another seven years' revolution of the

time of suffering would bring the desired rest to her head, to which the neuralgia was confined, and with it to her whole constitution, much impaired by this time. This patient's case will be given in this report. I resolved to try *subcutaneous injection* at the earliest convenient moment, and had soon an excellent opportunity of doing so. Other cases presented themselves. Although some of these were not at all adapted to this treatment—the cause being *central* and not *centripetal*—yet even in those cases where a cure is out of the question, I was greatly encouraged by the relief afforded; the more so, because it enables the sufferer patiently to persevere in a course of treatment adapted to the morbid state in which his disease has originated.

For the sake of brevity in detailing my cases, and to avoid otherwise necessary repetition, I shall call attention—

First, to that most important symptom in this disease—*pain, and its localization*.

Secondly, to the conditions on which the success of the operation in a great measure depends.

Thirdly, to cases, given in the order in which they occurred in my practice, and with the results up to the time of writing this report. The history of each case will be given more or less minutely, as its importance may demand, as well as any constitutional measures and treatment which were pursued at the same time.

Fourthly, I shall perhaps venture to offer a few suggestions as to the probable *modus operandi* of the remedy.

*Pain and its localization.*—By whatever name we may designate that variety of affections comprehended under the term *neuralgia*, they possess in common the one important symptom of *pain*, more or less violent, situated in the course of a nerve. The greatest disparity of the attacks exists. They may be sudden and violent, gradual or increasing in intensity as the disorder makes progress. It may pay its unwelcome visits with the certainty of the clockwork which announces the departed hour on the dial, or rush into any breach which it may espy in the citadel of the constitution, with the ferocity of an exasperated enemy. Neither the robust and plethoric, nor those of feeble habit of body, are exempt from its inroads. Care, mental anxiety, profuse and weakening discharges, predispose greatly to the malady. No clime nor country, no race nor sex, nay, hardly any age, except perhaps the first years of infancy, is free from it. The inhabitant of the forest writhes under a paroxysm of *tic douloureux*, as well as the most delicate *habituée* of the fashionable saloons in the capital of Southern Europe or those of the United States. *Sciatica* pays its unwelcome visits to the celestial Chinese as often, and in as good earnest, as to the serf of the soil of Russia, or the planter of Brazil.

Nevertheless, genuine cases of neuralgia are not so common as is generally supposed. Hence, to test the value of the present proposed method of relieving the pain, it is essential that its ap-

plication be limited to real neuralgic affections—where the pain is actually seated in the course of the nerve; and it must, moreover, be remembered, that agreeably to the laws by which nervous action is propagated, the irritation, that is, *the pain*, may be seated directly *on*, or reflected indirectly *on the nerve*, at any point between its extreme peripheral distribution and the point at which it joins the brain. To determine the precise seat of irritation, that is, *to localize the pain*, is, then, the first step to be taken towards the proper application of this local treatment, namely, the injection of sedatives.

M. Valleix, in his book entitled "*Traité des Névralgies*, Paris, 1841," first laid *particular* stress upon that most characteristic symptom, *pain*, and states that while, on the one hand, the superficial nerves of the body are of all others the ones most commonly affected with this disease, there are some points in their course in which this pain is more liable to be seated than in others; that no structural alterations have been discovered in the nerves to account for this greater predisposition to pain. He gives to these painful points, or seats of departure of pain, the name of "*foyers*." These are of the utmost importance to us in regard to the treatment. Ample observations and experiments have repeatedly convinced me of the correctness of M. Valleix's statement—that these points are usually more or less morbidly sensible to pressure, even in the intervals between the attacks of the sharp, sudden and intermittent pain. Nay, so great is the morbid irritability in many cases, that whilst firm pressure is borne without any complaint whatever in the rest of the course of the nerve, the slightest touch in these *foyers*, or principal points, is often sufficient to excite acute suffering, sometimes the most acute imaginable. I shall give the history of a case hereafter, in which slight pressure upon the supra-orbital nerve, where it emerges from the supra-orbital foramen, excited such a paroxysm of pain that the patient trembled all over; the spectacle was too sad to be witnessed more than once. But this was not the only painful point in the case; in fact, the whole system was so invaded by erratic suffering that the unfortunate patient seemed to have inherited the threatened doom of Caliban;

"Thou shalt have cramps,  
Side-stitches that shall pen thy breath up; urchins  
Shall, for that vast of night that they may work,  
All exercise upon thee; thou shalt be pinched  
As thick as honeycombs, each pinch more stinging  
Than bees that made them."

Valleix has classified the painful points in the course of any nerve thus:—

1. The place of emergence of the nervous trunk; for example, the trifacial at the supra- and infra-orbital and mental foramen.
2. The point where a nervous twig traverses the muscles to ramify on the integuments; similar to the parts which are traversed by the posterior spinal nerves.

3. The point where the terminal branches of a nerve expand in the integuments, as the terminal principal branches of all the cutaneous nerves, among which we may mention the anterior part of the intercostal nerves, &c.

4. The point where nervous trunks become superficial during their course, as the peroneal nerve.

Fortunately, the above points are exactly those where the nerve tends towards the surface, and where, consequently, it is most amenable to the treatment by injection.

But Valleix did not confine himself to the above four important landmarks, to be kept constantly in view. With admirable industry and precision, he has described the points of emergence of every branch of the great divisions of nerves which come into consideration in the treatment advocated by himself, namely, the application of successive small blisters in the course of the affected nerve. It is equally important to be perfectly familiar with all these points, in order to apply the method proposed by Prof. Wood where it will prove most effectual and can be most promptly applied.

These points of emergence are particularly numerous in the fifth pair of nerves, which, in at least two thirds of all the cases of neuralgia, is the seat of the suffering, the whole or a branch being affected. For convenience of reference in the cases to be detailed, as well as for practical purposes, and for the benefit of those readers who are not familiar with Valleix's work, I give here the points of emergence of the trifacial, arranged in tabular form. By means of it, is indicated nearly the exact position, at least in very many cases, where the instrument by which the narcotic is injected is to be inserted, when the pain is prominent in a principal trunk, or in some particular branch.

Points of emergence of the ophthalmic branch of the trifacial.	1st. The point of emergence of the <i>lacrimal nerve</i> at the external angle of the eyelid, or	a. <i>The palpebral point.</i>
	2d. Of the <i>frontal nerve</i> (external) at its emergence from the supra-orbital foramen, or	b. <i>The supra-orbital point.</i>
	3d. Of the <i>nasal nerve</i> , less determined, and situated a little within and below the internal angle of the eye, or	c. <i>The nasal point.</i>
Points of emergence of the superior maxillary branch of the trifacial.	1. The point of emergence of the <i>orbital nerve</i> towards the skin of the cheek, or	a. <i>The temporo-malar point.</i>
	2. The point of union of the <i>petrosal branch</i> of the <i>vidian</i> with the <i>facial</i> , giving origin to the <i>chorda tympani</i> , or	b. <i>The internal auricular point.</i>
	3. The emergence of the <i>superior alveolo-dental nerve</i> , or	c. <i>The superior dental point.</i>
	4. The emergence of the <i>superior maxillary</i> from the infra-orbital foramen, or	d. <i>The infra-orbital point.</i>



Points of emergence of the inferior maxillary branch of the trifacial.

1. The emergence of the *mas-*  
*seler nerve* where it passes  
through the sigmoid notch, or
2. The emergence of the *buc-*  
*cal nerve* into the skin and mu-  
cous membrane of the lips.
3. The emergence of the *tem-*  
*poral branch* of the *auriculo-*  
*temporal* or *anterior auricular*  
*nerve*, between the temporo-  
maxillary articulation and the  
auditory canal, or
4. The emergence of the *lin-*  
*gual* between the sub-lingual  
gland and the tongue, or
5. The emergence of the *in-*  
*ferior dental* from the mental  
foramen; one of the most re-  
markable points, or

a. *The temporo-maxillary point.*

b. *Point not well determined.*

c. *The auriculo-temporal point.*

d. *The lingual point.*

e. *The mental point.*

Point of interlacement not  
belonging exclusively  
to the fifth pair.

There must also be mention-  
ed the interlacement of the  
*frontal nerve* with the *superficial*  
*temporal* and the *occipital ma-*  
*ior and minor*, situated at the  
posterior part of the *sagittal*  
*suture* and almost immediately  
above the *parietal protube-*  
*rance*, or

*The parietal point.*

It would, however, be erroneous to believe that these painful points are met with equal frequency in practice. On the contrary, some present themselves very rarely. If we may be allowed to judge from a large number of cases which we have examined, reported by such authors as Valleix, Sandras, Piorry, Romberg, Downing and others, and from our own observation of fourteen cases, these painful points will be found to occur in frequency very nearly in the following order:

Points of emergence in the or- der of their frequency.	1st.	The supra-orbital point.
	2d.	" mental "
	3d.	" infra-orbital "
	4th.	" temporal "
	5th.	" nasal "
	6th.	" malar "
	7th.	" dental "
	8th.	" labial "
	9th.	" lingual "
	10th.	" palpebral "
	11th.	" parietal "

N. B.—With the mental point, the auriculo-temporal point is almost always present.

Frequently, the patient will complain of severe pain just in front and a little below the ear, the place of anastomosis of the portio dura with the divisions of the fifth pair. Whatever may be our opinion as to the real function of the *facial nerve*, whether it is ever affected by this disease, it is quite certain that this form of

neuralgia is difficult to diagnosticate, on account of the intimate connection of the "*pes anserinus*" with the trifacial nerve. I have more than once met with cases where the pain was principally confined to this position. Hence arises a most important question for us in regard to subcutaneous injection, namely, where to introduce most properly the sedative in such cases? This difficulty may be overcome if the practitioner will bear in mind the place and mode of union of the portio dura with the three divisions of the fifth. The branches of the facial being three, the ascending, transverse, and descending, they are found to form three principal unions.

*Ascending, transverse and descending branches of the portio dura.*

Place and mode of union of the portio dura with the three divisions of the fifth.

- 1st union.—a. Beneath the eye.  
b. Between the cheeks (buccal).  
c. The side of the nose (nasal).  
d. Terminating offsets of the superior maxillary.
- 2d union.—a. Between the mandibulo-labialis branch of the inferior maxillary.  
b. The cervico-facial branches of the portio dura (on the chin and lower lip).
- 3d union.—a. On the temple.  
b. On the eyebrow; union of the temporal branches of the facial nerve with branches of the frontal nerve just emerged from the supra-orbital foramen.
- Unions less important.—a. On the side and crown of the head.  
b. " eyelids.  
c. " cheek.  
d. " lower jaw.  
e. The front of the ear.

I shall now, in the second place, speak of *The conditions on which the success of the operation in a great measure depends.*

This may be done briefly, as much that has been said above of *pain and its localization* is directly applicable here. But we must go a step further, and endeavor to ascertain whether the disease is *central or centripetal*; in other words, whether the morbid process on which the neuralgia depends be seated in the brain, from whence, as the great centre, all nervous influence emanates, or in one of the conducting trunks by which irritations affecting the ultimate distribution of the nervous fibrils are conveyed to that central organ. We are of opinion that, in cases where the disease arises from within the cranium, the result of this treatment will not answer the expectations, for obvious reasons; and although the local manifestation in the conducting nerve is to a great extent under the influence of treatment, specially directed to it, yet it will do little good, being unable to reach the cause of the disease—I ought to say, its proximate cause—if, indeed, it ever proves beneficial at all. In one case, where the disease is seated unmistakably in the cranium, and in another where there exists caries of the superior maxillary bone, I have failed to perceive any improvement in the violence of the paroxysms, or any cessa-

tion of the pain, after repeated and powerful injections. In such and similar cases, as well as in all others where the pain is deep-seated, the result is at variance with the expectations.

On the other hand, in all cases where the cutaneous, and particularly the superficial cutaneous, nerves have been the seat of the malady, this treatment has answered my most sanguine hopes. Even in cases of long standing, when combined with appropriate constitutional treatment, I have succeeded in giving relief, for a considerable period of time, to the painfully harassed patient, after all other possible expedients had been tried in vain.

And let me here append a few words in regard to constitutional treatment in neuralgia, as one of the conditions of success. In almost every case that has come under my observation, a tonic treatment has been indicated. I have tried both mineral and vegetable tonics, and must give the preference to vegetable tonics. I have used the sulphate of quinine in many cases, and in all but one it was followed by good results. I am of opinion that a tonic treatment ought at once to be adopted, with few exceptions; and that the same ought to go hand in hand with the local treatment. Even the local treatment ought only to be resorted to when other remedies have failed. In mild cases of neuralgia, or in cases of recent standing, I have succeeded well with the solution of the valerianate of ammonia, used either in conjunction with injection or alone. I look upon the valerianate of ammonia as a preparation which deserves more the attention of physicians than it has hitherto received. But I proceed to give the cases, as being best adapted to illustrate the above statements.

[To be continued.]

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## TWO CASES OF TRACHEOTOMY FOR THE REMOVAL OF A FOREIGN BODY FROM THE TRACHEA.

[Communicated for the Boston Medical and Surgical Journal.]

### CASE I.—REPORTED BY DR. A. NEWMAN, OF LAWRENCE, KANSAS.

AUGUST 11, 1858, I was called to visit a child of Mr. Inman, about two years old, who had, it was supposed, on the day before got a watermelon-seed into the air-passages. On the following day I visited the patient, who lived at a distance of about twenty-five miles. I found, on arriving, that she was about her play as usual. When quiet, there was very little disturbance. A little exercise at play, however, produced shortness of breath and wheezing respiration, which could be distinctly heard at some distance. There was no difference in the respiratory murmur on the two sides of the chest. There had been but little cough. The mother informed me that, while playing with some watermelon-seeds, she was suddenly seized with great dyspnœa and coughing, which lasted for half an hour, and that during the paroxysm the face was livid. As

it was late in the evening when I arrived, no interference was proposed until the following morning. The child slept well through the night. I advised tracheotomy, which, after some hesitation on the part of the parents, was assented to. Having thoroughly etherized the patient, I opened the trachea in the usual manner. A watermelon-seed was immediately coughed out with considerable force. The wound healed rapidly, scarcely abridging the amusements or convenience of the patient.

CASE II.—REPORTED BY L. C. TOLLES, OF LAWRENCE, KANSAS.

On Saturday, the seventh of January last, happening to be in the neighborhood, I was called in to see a child of Nathan Hackett, a boy about three years of age, who, I was told, was suffering from a foreign body in the trachea, or in one of the bronchi. I found him sitting in his mother's arms, emaciated, and in a very feeble condition, not being able to walk a step, or even stand. The circumstances, as related to me, were as follows:—

At about the middle of last October, while amusing himself with his sister about the house, he got at some "burnt coffee" which had been set away to cool, and, crying, with his mouth full, accidentally drew into the air-passages one of the grains—as was supposed at the time—which threw him into violent paroxysms of coughing and choking, accompanied by the usual phenomena attending the presence of a foreign body in the larynx and trachea. After a short time, however, he got easier, and in a few days was about his play as usual, though still suffering more or less from cough, and a peculiar wheezing when at play. Nearly two months thus passed away, during which time there was considerable failing of the general health. About the month of December, he became worse, and the family physician was called, who pronounced his disease pneumonia. This lasted about two weeks, and was said to have been very severe.

On the seventh of January, as before stated, the case first came under my observation, when I made a careful examination of the chest by auscultation and percussion. The lungs appeared healthy excepting the lower two-thirds of the right, on its anterior aspect, where there was almost entire absence of the respiratory murmur, without dulness on percussion, save over a small space, just beneath the fourth rib. At this point a blowing sound could be distinctly heard, which proceeded, I had no doubt, from some obstruction in the right bronchus or some of its subdivisions. After expressing my convictions touching the case, I took my leave.

The next day (Sunday), at about two o'clock, P. M., I was summoned in haste, and found Dr. Barker, the family physician, in attendance—the case having assumed a much more serious and alarming aspect. The child was thrown into the most violent paroxysms of coughing, of a peculiar ringing and croupy nature, together with most distressing efforts to breathe; in short, it

seemed that life could be maintained but a little while longer. These alarming symptoms, however, lasted but a short time, when suddenly respiration became easier, and the patient gradually sank into a quiet slumber. It was now dark, and I left, promising to return the next morning.

Monday, Jan. 9th.—Returned in company with Dr. Albert Newman, of this city; found Dr. B. present, and the patient much worse than when I left him—he having had two or three severe paroxysms during the night; cough frequent and croupy; respiration labored and difficult; voice hoarse; pulse frequent and feeble; lips livid, and skin cool; in short, all the symptoms indicative of a speedily unfavorable termination. Tracheotomy was urged as affording the only chance of recovery, and was performed at about 12 o'clock, Drs. Newman and Barker assisting. We attempted to produce anæsthesia with a mixture of one part of chloroform to three of sulphuric ether, but owing to the dyspnœa, this, not acting favorably, was abandoned. Upon opening the trachea, a violent paroxysm of coughing ejected first a teaspoonful or more of muco-purulent matter, followed by a whole "*coffee grain*" of ordinary size, apparently in as good a state of preservation as when taken in.

This was followed with very little relief, so extensive and serious was the disease of the larynx and trachea left behind.

Tuesday, 5 o'clock, A. M.—Dyspnœa and lividity increased; all the symptoms of croup in its last stages present. I now hastily constructed two hooks by bending two pieces of common iron wire into suitable shape, which I applied to the wound, and bending them round on each side secured them on the back of the neck, and in this manner very effectually and safely established respiration through this new channel, it being now almost entirely cut off by the larynx. The breathing immediately became free and easy, and all the symptoms rapidly improved.

12 o'clock.—Patient doing well; in a gentle and quiet sleep, breathing easily and freely, 40 times per minute. Blood now perfectly aerated; pulse 132. An attendant is constantly sitting by, with a small piece of sponge to keep the opening in the trachea clear of mucus which is ejected in the act of coughing. One grain of calomel was ordered to be taken every four hours, and beef tea from time to time.

Wednesday, 11th.—Had a comfortable night; slept at one time four hours; has paroxysms of coughing every two or three hours. The mucus coughed during some of the paroxysms has been a little bloody. The treatment of yesterday to be continued.

12th.—Pulse this morning 100, regular and full; respiration 40, and easy as through the natural channel. At about 8 o'clock, patient became quite restless and uneasy, indicating the cause as well as he could (not being able to speak), to be pain in the bowels, which were hard and tympanitic. Hot fomentations were applied

to the bowels, and stimulating anodynes taken by the mouth; but, notwithstanding our best endeavors, there was more or less suffering for some two hours, when, after several alvine discharges, it passed away and gave us no further trouble. This afternoon, considerable irritation and much more swelling than usual about the wound in the trachea, which caused some narrowing, and consequently more or less difficulty of breathing; but by changing the position of the hooks, and carefully removing some lumps of dried mucus adhering to the bottom and sides of the opening, the respiration was relieved, and the irritation and swelling soon began to subside. The pulse at this time rose to 120. Calomel to be omitted.

13th.—Patient comfortable; wound looks better, but no air yet passes by the glottis; any attempt to close the artificial opening causes intense suffering. Pulse 96 to 104.

Removed hooks from trachea, which remains open without them. Patient breathes a little through the nostrils, and, on closing the wound, is able to articulate a word or two, for the first time since Tuesday.

15th.—Doing finely; calling often for food. Takes beef tea and broth with crackers, also a little milk. Respiration nearly re-established; voice yet hoarse, and cough rather tight and ringing.

17th.—Closed wound with adhesive strips, when respiration was easily performed through the glottis.

20th.—Wound nearly healed; appetite good, and patient gaining strength rapidly; some irritation and cough remain. Dismissed the case, but have heard from patient from time to time up to the present date (March 9th), when he is in perfect health.

It should be borne in mind that this case was treated under the most unfavorable circumstances. On the night after the operation, the weather turned suddenly cold and windy. Our patient was in a "*log cabin*" with but one room, in the heart of Kansas Territory, which, though as comfortable as Kansas farm-houses generally, would hardly compare with the poorest of New England tenements. The cold wind whistled through its many crevices, and, with the hottest fire that could be kept, one could not possibly keep both sides warm at the same time. Hence, anything like a uniform temperature was out of the question. No tracheal tube could be obtained, but the apparatus used, though not as elegant, was, I think, quite as convenient and efficient; and were I to treat another case of the same kind, I believe I should use the hooks instead of the canula, though each were alike at hand.

*Lawrence, March 14th, 1860.*

# STATISTICAL RESUME OF 61 CASES OF OVARIOTOMY UNDERTAKEN OR EXECUTED IN GERMANY.

BY M. G. SIMON.

[Translated from the *Gazette Hebdomadaire*, No. 3, 1860, for the Boston Medical and Surgical Journal, by O. D. PALMER, M.D., Pa.]

OF 61 females, in whom the operation was completed, or only commenced, 44 succumbed within a short time after the operation.

In 5 cases, the operation did not procure any amelioration, or but merely a temporary benefit. There were but 12 cures.

The operation could be terminated only in 44 of these cases. Out of this number, there were 32 deaths by the operation alone. One woman, who had removed from her, a multilocular and colloid cyst, died eight months later, with cancerous productions of the pancreas, the lymphatic ganglions, and the lungs. A radical cure was effected in 11 cases.

The operation remained uncompleted in 15 cases, for the reason that the tumors had contracted intimate adhesions with the neighboring parts; 11 of these patients died immediately. In the others, the operation remained without advantage, or produced but a temporary amelioration.

In 2 cases there had been a mistake in the diagnosis; of these there was 1 death and 1 recovery.

The statistics published anteriorly were less disastrous. According to the figures of M. Fröhlich, the operation of ovariectomy would be more grave than the Cæsarean operation, for which the mortality is 63 out of 100, according to Kaiser, and 2 out of 3, following other authors. (*Scanzani's Beiträge zur Geburtskunde.*)

We had published in 1856 (page 788, *Gaz. Heb.*), a *relevé* of M. Fock, who analyzed a more considerable number of ovariectomies, than this of M. Simon, and who reports a mortality of 120 from 292, *plus* 52 relapses. It is apparently shown that ovariectomy had afforded its most deplorable results in Germany; but there is reason for believing that this difference is caused by some accidental circumstance, such, for example, as giving publicity equally to failure and to success. However this may be, the last English summaries are far from being so terrifying as this of M. Simon, and Dr. Barnes has not feared even to advance, recently, to a medical society of London, that we are not only authorized to practise ovariectomy, but that it is a serious duty to recommend an operation capable, using his expression, of saving the lives of 200 patients out of 300, affected with encysted dropsy of the ovary, and to refuse the afflicted this benefit would be to desert their cause.—(*Lancet*, July, 1858.) It is proper to remark, that the *relevé* of Dr. Barnes only contains 103 cases (*Statistics of R. Lee, and 21 cases published since*), and to which it is necessary to add, precisely, these 61 cases of M. Simon. Dr. Barnes, moreover, was



not acquainted with the statistics of M. Fock, the most considerable of all, and which remain very far from 200 cures out of 300.

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A CASE OF CANCER OF THE STOMACH ASSOCIATED WITH TUBERCULAR DISEASE OF THE LUNGS.

BY CHARLES T. COOTE, M.D., F.R.C.P., ASSISTANT PHYSICIAN TO THE MIDDLESEX HOSPITAL.

ALTHOUGH it is now known for certain that cancer and tubercle may coexist in the same individual, yet the coincidence is of sufficient rarity to render it desirable to accumulate instances of the fact.

F. G., aged 60, a "painter's jobber," was admitted into the Middlesex Hospital on the 10th of August, 1858, under the care of Dr. Goodfellow, to whose kindness I am indebted for the notes taken during life, and which add so greatly to the interest of the *post-mortem* examination. When admitted, the man was emaciated, pallid, with dropsical legs, and complaining of a "troublesome cough, worse at night." His then illness was of eight or nine weeks' standing; but he had been ailing long before. There was "dulness on percussion over the apex of each lung, limited in extent, but greater on the left than on the right side; slight bronchial respiration and increased vocal resonance."

On the next day, attention was drawn to the abdomen, where was detected "an irregularly circumscribed, indurated tumor, slightly movable by change of posture; extending from the umbilicus to about three inches upwards and to the left." He complained of some pain in this spot, which, however, was relieved by a dose of castor oil, and which never returned. This tumor was supposed to be malignant; and from its situation, and from the absence of any symptom referable to the stomach or liver, Dr. Goodfellow came to the conclusion that it was situated in the omentum, and probably involved a portion of the transverse colon.

From this time until the man's death (which took place on the 20th of October, from exhaustion and general dropsy), no change of any moment occurred. He retained throughout an excellent appetite, and was placed successively on broth diet, fish diet, and ordinary diet; he then had milk diet, with a chop, and was particularly fond of gruel, of which he ate largely on the day of his death. During all this time he never once vomited, nor complained (after the castor oil) of pain in the abdomen.

I extract from my own notes such portions of the autopsy as bear upon the chief points of the case.

Right lung: pleura adherent at posterior part of the upper lobe. The adhesions, easily broken down, consisted of recent lymph, and

of a number of minute whitish granulations, about as large as a pin's head. Both the upper lobes were highly congested, but floated in water. The lower lobe was of a deep violet color, very friable, and sinking in water.

The left lung was small, pale, collapsed, free from pleural adhesions. On section, the upper lobe was found to be profusely studded with grey miliary tubercles, interspersed with a large amount of pigment. Among these was a much smaller proportion of yellow tubercles; and of these, some had undergone softening, leaving small cavities, none larger than a pea. The lower lobe was emphysematous.

Under the microscope, these tubercles presented the usual elements—small, shrivelled, angular nuclei, microscopic granules, and (in the yellow tubercles) fat.

The abdomen being opened, "On the anterior surface of the right lobe of the liver, just beneath the ensiform cartilage, appeared a solid mass, of a yellow color, as large as a walnut, and with an ulcerating surface. In other parts of the liver were numerous similar masses, varying in size from that of a pea to that of a pigeon's egg.

"The stomach (which was firmly adherent to the liver, to the spleen, and to the transverse colon) was of normal size. Its walls, with the exception of the extreme fundus, and the pylorus itself, consisted of a hard, unyielding substance, about three quarters of an inch in thickness, the internal surface of which was in a state of uniform ulceration. On section, this structure was found to occupy all the coats of the stomach, except the peritoneal, which was unaffected. The extreme portion of the fundus appeared quite healthy. The œsophagus was healthy."

These structures were examined microscopically.

The yellow masses in the liver consisted essentially of large nuclei containing one or two very large, and very distinct nucleoli. With these were many polygonal cells in various stages of degeneration.

The structure occupying the walls of the stomach presented to the naked eye a greyish translucent substance, interspersed with small opaque masses of a yellow color. The former consisted of a loosely reticulated fibrous stroma, containing nuclei exactly resembling those described above, microscopic granules, and a few rather small cells containing large nuclei. The opaque yellow substance consisted of microscopic granules (very numerous) of fat, and of structureless corpuscles not distinguishable from colloid.

"The intestines were quite normal, except where the transverse colon was adherent to the anterior wall of the stomach, at which spot it was contracted to the extent of half its diameter."

In this case there appear to be several points of interest, irrespective of the mere coincidence of tubercle and cancer:—

- I. The manner in which the two diseases manifested themselves

contemporaneously during life. On admission, the man's complaint was of cough. Attention was only subsequently directed to the abdomen, by the complaint of pain; and, as this symptom was relieved by castor oil, it seems probable that it was referable rather to the constricted transverse colon than to the diseased stomach itself.

II. As before stated, there was no symptom of any disease of the stomach during the time that the man was in the Hospital. His appetite was good; he complained of no pain in the situation of the stomach either before or after taking food, and there was an entire absence of nausea or any inclination to vomit. His bowels acted regularly once or twice daily. The anæmic state of the patient, the dry and parchment-like appearance of his skin; the general innutrition, notwithstanding the seemingly due performance of the digestive process; and the anasarca (no albuminuria, or other positive sign of disease of the kidneys or heart being present); all these signs taken in connection with the existence of the abdominal tumor, led to the conviction that the man was laboring under malignant disease, and that it was probably associated with tubercular disease of the lungs.

III. The situation of the cancerous growth in the stomach was very unusual; neither the extreme fundus nor the pyloric orifice being affected.

IV. The fact that the two diseases (cancer and tubercle) must have gone on simultaneously. Whatever may have been the date of the first deposit of tubercle in the apex of the left lung, some portions of it had certainly recent softening; and other portions (in the stage of yellow tubercle) were possibly advancing towards the same event. This state of retrogressive transformation is very analogous to, if not identical with, that change of a cancerous deposit which is called its "ulceration." Moreover, simultaneously with these changes, recent tubercular exudation had occurred in the pleura investing the apex of the opposite lung.—*Medical Times and Gazette*, Oct. 15, 1859.

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WM. McDONALD, L.R.C.P. and L.R.C.S. Edin., recommends, in the London *Lancet*, the hydrochloric acid in both the external and internal treatment of smallpox. It allays, he says, the prickling pain so distressing in some cases, reduces the tumefaction, the vesicle maturates earlier, and desquamation takes place sooner, leaving the skin smoother and purer than by any other plan he has tried. Internally, one drachm of the commercial acid to twelve ounces of water: dose, a teaspoonful in a glass of water; to be sipped often. Externally, he applies it to the face, hands and feet—the parts which suffer most from irritation: for the face, half a drachm to, say, ten ounces of water; apply with a hair pencil, twice or thrice daily, using occasionally the mercurial liniment or cold cream.

### Bibliographical Notices.

*Clinical Lectures on the Principles and Practice of Medicine.* By JOHN HUGHES BENNETT, M.D., F.R.S.E., Professor of the Institutes of Medicine, and Senior Professor of Clinical Medicine in the University of Edinburgh. From the last Edinburgh Edition. With five hundred illustrations on Wood. New York: Samuel S. and William Wood. 1860. 8vo. Pp. 952.

THIS third edition of Prof. Bennett's work has been enlarged by the addition of fifty pages, twenty-one new cases, and thirty-four new wood-cuts; it is therefore even more worthy of the favor which its predecessors have met with. A work so well known scarcely needs commendation, but we cannot forbear to add a word of recommendation to those who are not acquainted with it. To students it is an invaluable companion. So far as clinical instruction can be given by books, this one affords it; relating cases and demonstrating, by means of excellent engravings, the pathological appearances. To the practitioner it will be found no less useful as a work of reference, since it includes all that has been added to the science of practical medicine to the present time, including both the descriptions of diseases and their treatment.

*Clinical Lectures on Certain Acute Diseases.* By ROBERT BENTLEY TODD, M.D., F.R.S., &c. &c. Philadelphia: Blanchard & Lea. 1860. 8vo. Pp. 308.

THE nature and scope of this volume, which comes to us in the tasteful and workmanlike dress which distinguishes all the issues of this celebrated publishing house, will perhaps be better set forth by the following extract from the preface than by a more elaborate statement:

"That it should be the aim of the physician (after he has sedulously studied the clinical history of disease, and made himself master of its diagnosis), to inquire minutely into the intimate nature of these curative processes—their physiology, so to speak; to discover the best means of assisting them, to search for antidotes to morbid poisons, and to ascertain the best and most convenient methods of upholding vital power.

"If one may venture a suggestion respecting the future of pathology, and of practice founded on it, it would be that a time is not far distant when all men who practise medicine in a scientific spirit, and divested of the trammels of routine, will discard the distinction of acute inflammations and acute disease in general, into *asthenic* and *sthenic*—that all these maladies will be regarded as more or less asthenic, and as promoting more or less an undue waste of tissue, and that, in treatment, an object of primary importance will be the early adoption of means to uphold vital power, and the watchful and continued use of them throughout the duration of the case.

"It will not be affirmed by any one that the doctrines of a science so abstruse and so difficult as pathology, should not be reviewed and reconsidered from time to time. There never was a period when a candid and ample reconsideration of general pathology promised more fruitful results than the present. Our vastly extended acquaintance with anatomy and physiology, the greatly enlarged security of the basis on which our knowledge of function rests, the much increased accumulation of facts of clinical history, all afford most important data for new inductions. And I would remark that such inductions ought to be made from the deranged functions of the living rather than from the facts of morbid anatomy, which properly should rank with the facts of clinical history, and which, in reality,

are inferior in value to most of the phenomena of disease during life, being no more than the marks of the ravages of disease, and affording comparatively little insight into its intimate nature. The real basis of all pathological inquiry must be clinical research, made with the fullest appreciation of the facts of anatomy and physiology; mere morbid anatomy leads necessarily to erroneous views of pathology and practice."

The diseases treated of are Rheumatic Fever, with its varied complications; Continued Fever; Erysipelas; Erysipelas of the Fauces; Acute Internal Inflammations; Pyæmia; Pneumonia and its complications; Simple Pneumonia; and the Therapeutical Action of Alcohol, the last being a lecture based upon the case of a child poisoned by this stimulant. Ninety-three cases, fully and very intelligently reported, form the basis upon which the accomplished author has reared a superstructure of clinical teaching, clearly setting forth his peculiar views and ideas upon treatment. It comes to the profession at this time with a twofold value; first as the teachings of an acknowledged leader in the profession, and secondly as a kind of legacy, his death having not long since occurred. It cannot fail to be a useful and instructive volume. For sale by Brown, Taggard & Chase.

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*Transactions of the American Medical Association*, Vol. XII. Philadelphia: printed for the Association. 1859. 8vo. Pp. 722.

THE twelfth volume of the American Transactions, though of a less varied character than some which have preceded it, yields to none in the value of its contents. These comprise an elaborate Report on the Medical Topography and Epidemics of California; a Report on a Uniform Plan of Registration; and Observations on Malarial Fever, by Dr. Joseph Jones, the last a long and complete investigation of that important subject. Besides these, there are a few smaller papers. Our limits do not allow us to enter into details concerning this important work; we can only say that it is an honor to the country as well as to the Association.

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*Urinary Deposits; their Diagnosis, Pathology and Therapeutical Indications.* By GOLDING BIRD, M.D., F.R.S. Edited by EDMUND LLOYD BIRKETT, M.D., &c. A new American from the fifth London Edition. With eighty Illustrations on Wood. Philadelphia: Blanchard & Lea. 1859. 8vo. Pp. 382.

THE present edition embraces everything of practical value which has been added to our knowledge on the subject of urinary deposits since the printing of the last, and continues therefore to be, what it always has been, the most useful treatise on this department of practical medicine in our language.

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*Elements of Medical Jurisprudence.* By THEODRIC ROMEYN BECK, M.D., LL.D., and JOHN B. BECK, M.D. Eleventh Edition, revised by C. R. Gilman, M.D., Professor of Medical Jurisprudence in the College of Physicians and Surgeons of New York. Philadelphia: J. B. Lippincott & Co. 1860. 2 Vols. 8vo. Pp. 884 and 1003.

OF the present edition of this classical and invaluable work we will only say that it is enriched and improved by the incorporation of a large amount of new matter, collected by Dr. T. ROMEYN BECK, pre-

vious to his death, and arranged by a number of competent collaborators, under the direction of the editor. The work has been translated into nearly every modern language, and its value and authority are too well known to render it necessary for us to say anything in its praise.

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## THE BOSTON MEDICAL AND SURGICAL JOURNAL.

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BOSTON: THURSDAY, APRIL 5, 1860.

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ACUPRESSURE.—Attention having been lately called to this new method of arresting hæmorrhage, we were interested to learn that in the year 1853, Dr. J. M. Carnochan, of New York, employed it successfully in a case of hæmorrhage from a wound on the left side of the forehead, in a boy with the hæmorrhagic diathesis. The wound was received while playing, and extended about two inches upwards and backwards from the superciliary arch, complicating some of the anterior branches of the temporal artery, and detaching the scalp considerably from the cranium. After resorting to various modes of compression without success, Dr. Carnochan says, in the *American Medical Gazette*, that he

"Selected two long suture-needles, slightly curved towards the point. Feeling with the forefinger of the left hand for the artery, where it passes over the zygoma in front of the ear, I dipped the point of the needle through the skin and other tissues, about three lines to the right of the course of the vessel, and carried on the needle below the artery, directing the point so as to emerge through the integuments, at a corresponding point on the left side of the vessel. This done, I made a figure of 8 around the needle, in order to increase the compression already effected on the vessel by the position of the needle. The same procedure was carried out on the opposite side, in order to intercept the anastomosing circulation.

"The wound was now cleansed, and filled with dry lint; compresses were laid over the lint, and the dressing completed by the application of Barton's bandage.

"Entire success followed the compression of the artery thus effected by the needles. The patient rallied under the use of cordials and tonics; the needles were removed from the arteries on the fourth day; the wound granulated and healed kindly, and in four weeks he was discharged as well.

Dr. C. further states that he recently "had an opportunity of applying this method to the arteries of a bleeding stump, after amputation, and with a very satisfactory result. The case was one requiring amputation of the right foot, at the tarso-metatarsal line of articulation. The operation was performed by making a semi-lunar flap on the dorsal aspect of the foot, a little in front of the tarsus. The flap was then dissected backward, and the dorsal and plantar articular ligaments, between the tarsal bones and the metatarsus, severed completely. The foot being held horizontally, the narrow knife was slipped under the tuberosities of the first and fifth metatarsal bones, and carried forward, grazing the lower surface of the metatarsal bones, so as to make a flap of sufficient extent to cover the exposed stump. The anterior tibial, external plantar, and internal plantar arteries bled freely, and three smaller vessels, also, afforded blood enough to require their obstruction. Regarding this as a favorable opportunity to test the effect of acupressure in amputation, to arrest the bleeding from the anterior tibial, the point of a steel shawl-pin, with a metallic head, and about four inches long, was passed slantingly to the depth of half an inch into the tissues, at about an inch and a half from the course of the artery on the side nearest; and having passed on-

ward, was made to emerge about a line from the artery. The pin was next directed over the trunk of the vessel, about a quarter of an inch from the bleeding orifice, and again dipped into the tissues on the other side of the vessel, about a line distant from it. The pin was then still pushed through the tissues for about an inch and a half, and again made to emerge onward for an inch. The compression on the artery was complete, and it ceased to bleed. The external plantar artery was next treated in the same manner, and with a similar result, as well as the internal plantar and the other vessels which would have required the ligature. In these last-mentioned arteries, not having at hand acupuncture needles of suitable length, short suture-pins were employed; tying a piece of thread to the head of each, in order that they might be pulled away at the proper time. In securing the anterior tibial artery, it was not thought necessary to pass the pin through the integuments, as Professor Simpson recommends. The flaps were now brought together by points of suture, and the long pins and threads attached to the shorter ones left between the lips of the line of union. The pins were removed on the seventh day. Since the operation, the patient has been most comfortable, and without the slightest evidence of secondary hæmorrhage."

Judging from the results obtained in the cases above related, Dr. C. expresses himself as having "no doubt that acupuncture will become a distinct and established method for arresting hæmorrhage in operations; and that, although it may not supersede the use of the ligature, it will, in many instances, supplant its use, as being more simple and equally effective, and as less likely to interrupt the primary union of wounds."

He justly adds, in conclusion, that "the celebrated Edinburgh Professor merits the thanks of the profession for formulizing 'acupuncture' into a distinct method."

**ARTIFICIAL AUTOPHAGY.**—This is the somewhat novel title of a paper recently read at a meeting of the French Academy of Sciences, by M. Anselmier. The word *autophagy* has been applied to that natural process by which the body, when deprived of food, converts to its use, as aliment, those portions of its own substance capable of being assimilated, this, of course, causing rapid emaciation, and a correspondingly rapid failure of all the powers of life. *Artificial autophagy* is the term applied by M. Anselmier to the feeding of the body with its own blood, this serving as its only aliment.

The object of the author of this paper, is to show from his experiments that where death is imminent from starvation, life may be prolonged by this method; which may hence be resorted to in cases where it is of the utmost importance to eke out the vital power to the latest moment, as in certain cases of shipwrecked persons.

M. Anselmier proceeds on the hypothesis that in all warm-blooded animals, death by starvation is not the result of the entire consumption of the aliment which the body is capable of furnishing; but rather, of the loss of the heat-making power, in consequence of which the animal heat becomes lowered to a point incompatible with the performance of the nutritive functions, the production and accumulation of a certain quantity of caloric being one of the necessary conditions of nutrition in animals of this class. The heat-making power, he contends, is directly dependent upon the activity of the gastro-intestinal function of absorption; hence, the importance of maintaining this function, as far as may be, in its normal condition. "If," says M. Anselmier, "a certain quantity of its own blood be given to an animal deprived of food, this function being kept in action, the animal heat is found to undergo far less daily diminution, and a greater degree of emaciation is reached before death takes place (the loss amounting to from four to six tenths of the original weight of the body) than where all ali-



ment is withheld. In the latter case, not more than from two to five tenths are lost before the failure of the vital powers."

That life may be somewhat prolonged by the method proposed, in certain cases of starvation, seems to be pretty well established by M. Anselmier's experiments, but it may be doubted whether it will ever prove of practical use. The conclusions arrived at are, however, of much physiological interest, and it is by no means certain that desperation may not lead, in some cases, to the adoption of the mode suggested, revolting as it appears to those who have been spared the pains and perils of starvation.

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NON-APPEARANCE OF THE ERUPTION IN CONFLUENT SMALLPOX IN PARTS TO WHICH MUSTARD WAS APPLIED.—The following note from Dr. Lenardson, of Yellow Springs, Ohio, will be read with interest. He remarks: "In a recent case of smallpox, in the incipient stage, with high fever, before the eruption made its appearance, I ordered a mustard cataplasm alternately to the back of the neck, pit of the stomach, and the small of the back, as a counter-irritant, to relieve the distress of the patient. It proved a preventive of the eruption in those localities, although it was a well-marked case of confluent smallpox. Perhaps I should not say it proved a preventive, as this is the only case in which I have used it, but such was the fact. There was no eruption where the cataplasm had been applied. The cause of its non-appearance may be ascertained by future experiments, and I wish to call the attention of the profession to these facts or phenomena. I have no theory to offer, and trust that physicians in our large cities, as Boston and New York, where cases of smallpox are common and frequent, will test the matter, and prove whether the simple application referred to will prevent the eruption, and consequently the pitting so much to be dreaded on the human face, especially of ladies. If it will, the discovery will be of some importance, for, on its appearance, the patient's face and neck could be treated with this simple remedy, and thus the disagreeable and mortifying effects of the disease be prevented.

Yours, &c.,

H. LENARDSON, M.D.

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MEDICAL DEPARTMENT OF THE UNIVERSITY OF PENNSYLVANIA.—The commencement exercises of this ancient school of medicine were held on the 15th of March. The degree of M.D. was conferred on 160 graduates—previous to which, the ceremony took place of presenting to the Board of Trustees, by the class, the portrait of George B. Wood, M.D., LL.D., on the occasion of his retiring from the chair of clinical medicine which he has so long occupied. Dr. J. C. Shorb, of Maryland, made the presentation speech, and Dr. R. La Roche replied on receiving the picture for the Board. Dr. Wood, with much feeling, expressed his gratitude for the compliment paid him. The valedictory address to the graduates was delivered by Dr. Joseph Carson, Prof. of Materia Medica and Pharmacy.

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PHILADELPHIA COLLEGE OF PHARMACY.—The annual commencement took place on the 15th of March. The degree of Graduate of Pharmacy was conferred on 29 members of the class, and the valedictory was delivered by Prof. Robert P. Thomas, M.D.

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MEDICAL DEPARTMENT OF THE PENNSYLVANIA COLLEGE.—The annual commencement took place on the 3d ult., when the degree of Doctor of Medicine was conferred on thirty-eight young gentlemen.

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OGLETHORPE (GEORGIA) MEDICAL COLLEGE.—The annual commencement exercises of this school, located in the city of Savannah, were recently held, and the medical degree was conferred on 21 graduates, 4 of whom had "previously re-

ceived degrees in northern institutions." The late class numbered 60 matriculants—from seven of the Southern States. A beautiful volume of surgical plates was presented to Dr. Samuel F. Walker, of Texas, one of the graduates—a prize won by Prof. Blair for proficiency in anatomy. Dr. Geo. R. Black, of Savannah, was the orator on the occasion.

**SAVANNAH MEDICAL COLLEGE.**—The commencement of this School took place on the 15th of March. Twelve young men received the degree of M.D.; and the honorary degree was conferred on Drs. James R. Smith, of Georgia, and Owen B. Bowen, of Alabama.

**CINCINNATI COLLEGE OF MEDICINE AND SURGERY.**—At the late annual commencement of this institution, the degree of Doctor of Medicine was conferred on 30 graduates. The number of matriculants at the session was 97.

**RUSH MEDICAL COLLEGE.**—The seventeenth annual commencement of this institution (in Chicago, Ill.) was held on the 15th of February. The number of graduates was 36. Dr. Brainard delivered the valedictory address.

**ARREST OF HEMORRHAGE BY ACUPRESSURE.**—On Tuesday last, this new plan was put in practice in the Carlisle Infirmary, after an amputation of the leg, by Mr. Page, Dr. Simpson being present. It was most successful. Very little blood was lost, and there was less difficulty in controlling the vessels than is often experienced in this situation.—*London Lancet*, Feb. 4th.

**ROYAL COLLEGE OF PHYSICIANS, LONDON.**—Amongst the graduates elected to the Membership of the College, at the Comitia Majora, held on the 1st inst., was Charles Edward Brown-Séquard, M.D., Paris. The enrolment of this distinguished man in the ranks of English physicians will be hailed with universal satisfaction.—*Ibid.*

#### VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, MARCH 31st, 1860.

##### DEATHS.

	Males.	Females	Total.
Deaths during the week, . . . . .	55	25	80
Average Mortality of the corresponding weeks of the ten years, 1850-1860,	40.9	34.4	75.3
Average corrected to increased population, . . . . .	..	..	86.9
Deaths of persons above 90, . . . . .	..	1	1

##### Mortality from Prevailing Diseases.

Consumption.	Croup.	Scarlet Fever.	Pneumonia.	Measles.	Smallpox.
15	2	4	8	1	1

##### METEOROLOGY.

From Observations taken at the Cambridge Observatory.

Mean height of Barometer, . . . . .	29.797	Highest point of Thermometer, . . . . .	71
Highest point of Barometer, . . . . .	30.030	Lowest point of Thermometer, . . . . .	23
Lowest point of Barometer, . . . . .	29.540	General direction of Wind, . . . . .	S. W.
Mean Temperature, . . . . .	41.14	Whole am't of Rain in the week . . . . .	none.

**ERRATA.**—In the case of retinal detachment in the JOURNAL for March 8th, page 114, line 32, for "bit of fragments," read *bit of pigment*; page 116, line 15, for "exists," read *consists*. It should also have been mentioned that the diagram is modified from one of Jæger's. In the number for March 29th, page 173, line 10, for "smallpox is cowpox," read *cowpox is smallpox*.

**Books and Pamphlets Received.**—Report of the Board of Managers of the Western Lunatic Asylum of the State of Kentucky, for the years 1858 and 1859.

**Communications Received.**—Exstirpation of the Parotid Gland.—Acute Idiopathic Pericarditis.—Cases of Tracheotomy.—Pelvic Cellulitis.

**Deaths in Boston** for the week ending Saturday noon, March 31st, 80. Males, 55—Females, 25.—Accident, 4—apoplexy, 1—congestion of the brain, 1—disease of the brain, 2—inflammation of the brain, 1—cancer, 2—consumption, 15—convulsions, 1—croup, 2—dropsy, 2—dropsy in the head, 4—dysentery, 1—infantile diseases, 5—scarlet fever, 4—typhoid fever, 1—gastritis, 1—hypochondriasis, 1—disease of the heart, 3—congestion of the lungs, 1—disease of the lungs, 1—inflammation of the lungs, 8—disease of the liver, 1—marasmus, 3—measles, 1—old age, 3—phlebitis, 1—pleurisy, 1—premature birth, 1—scrofula, 1—smallpox, 1—teething, 1—unknown, 5.  
Under 5 years, 34—between 5 and 20 years, 6—between 20 and 40 years, 14—between 40 and 60 years, 13—above 60 years, 13. Born in the United States, 53—Ireland, 22—other places, 5.